

CAPACITY BUILDING WORKSHOP FOR THE RENEWABLE ENERGY FUTURE SECTOR SKILLS COUNCIL

Agenda

Time	Subject
10.00 – 10.30	Welcome Introduction of the workshop (objectives and recap of previous activities)
10.30 – 11.00	Current developments in the establishment and management of Sector Skills Councils in Egypt
11.00 – 12.00	Mapping of Labour Market Information resources Group work for interactive exchange of views and experiences in collecting labour market and skills related information. Recap in plenary session
12.00 – 12.30	<i>Coffee break</i>
12.30 – 13.30	Sector reports on human capital development and skills needs An introduction to the concepts, relevant practices and international approaches
14.00 – 15.00	Next steps for establishing and strengthening the SSC for renewable energy Interactive session for priority setting for the SSC RE and planning of next steps + Q&A session
15.00 – 16.00	Lunch

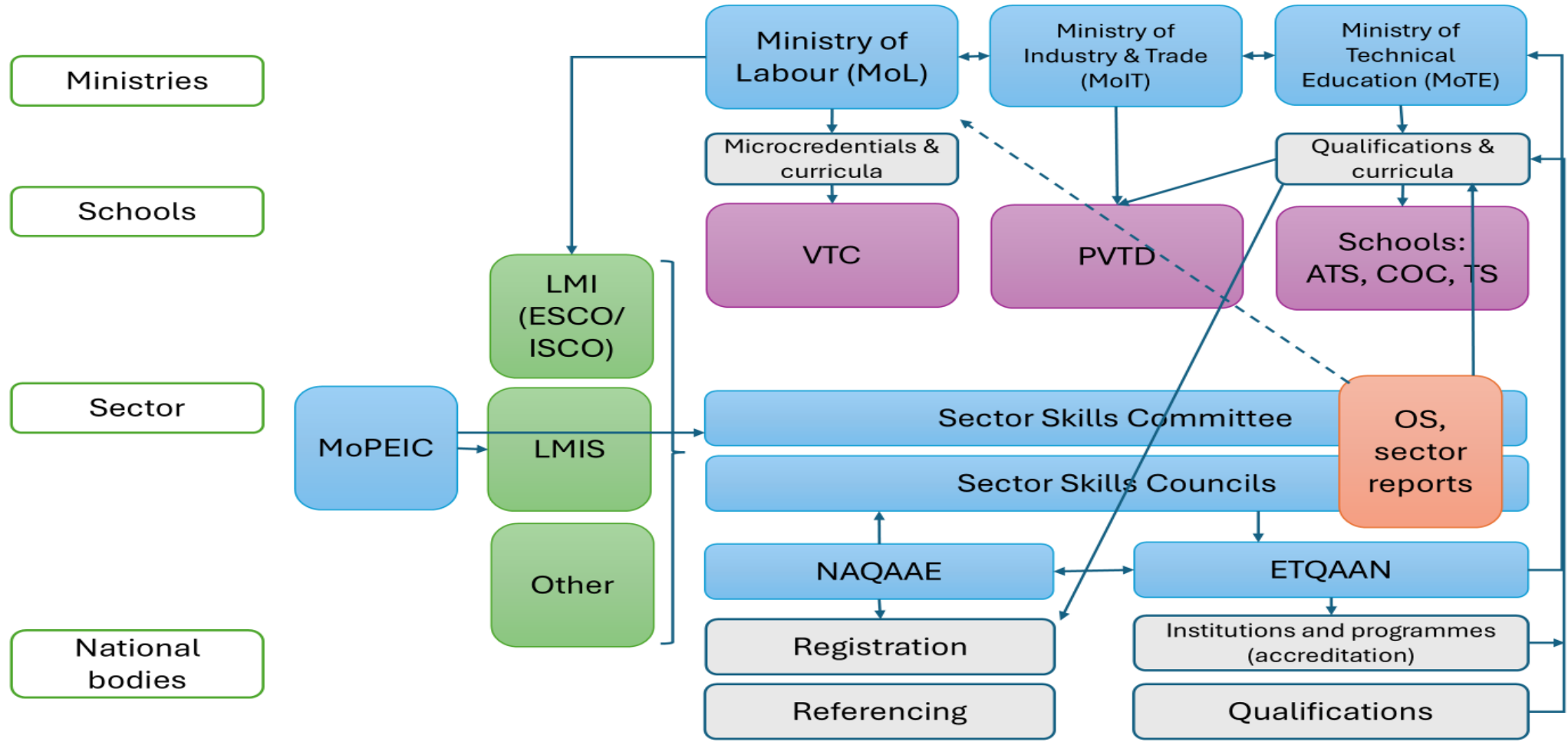
Objectives of the workshop

- This workshop will focus on the outputs of a Sector Skills Council that contribute to improving the relevance of Technical Education and Vocational Training (TVET), such as sector and skills data, sector skills strategies, gap analysis on skills demand and TVET provision, and occupational standards.
- It is the final workshop of this first phase of ETF support to establishing the SSC for the Renewable Energy sector
- Specific topics include:
 - Collection, analysis and elaboration of labour market and skills intelligence
 - The role of the SSC in anticipating the evolution of their sector: Sector reports
 - Translating sector development into skills needs: Sector skills strategy
 - The Egyptian landscape of qualifications in the renewable energy sector

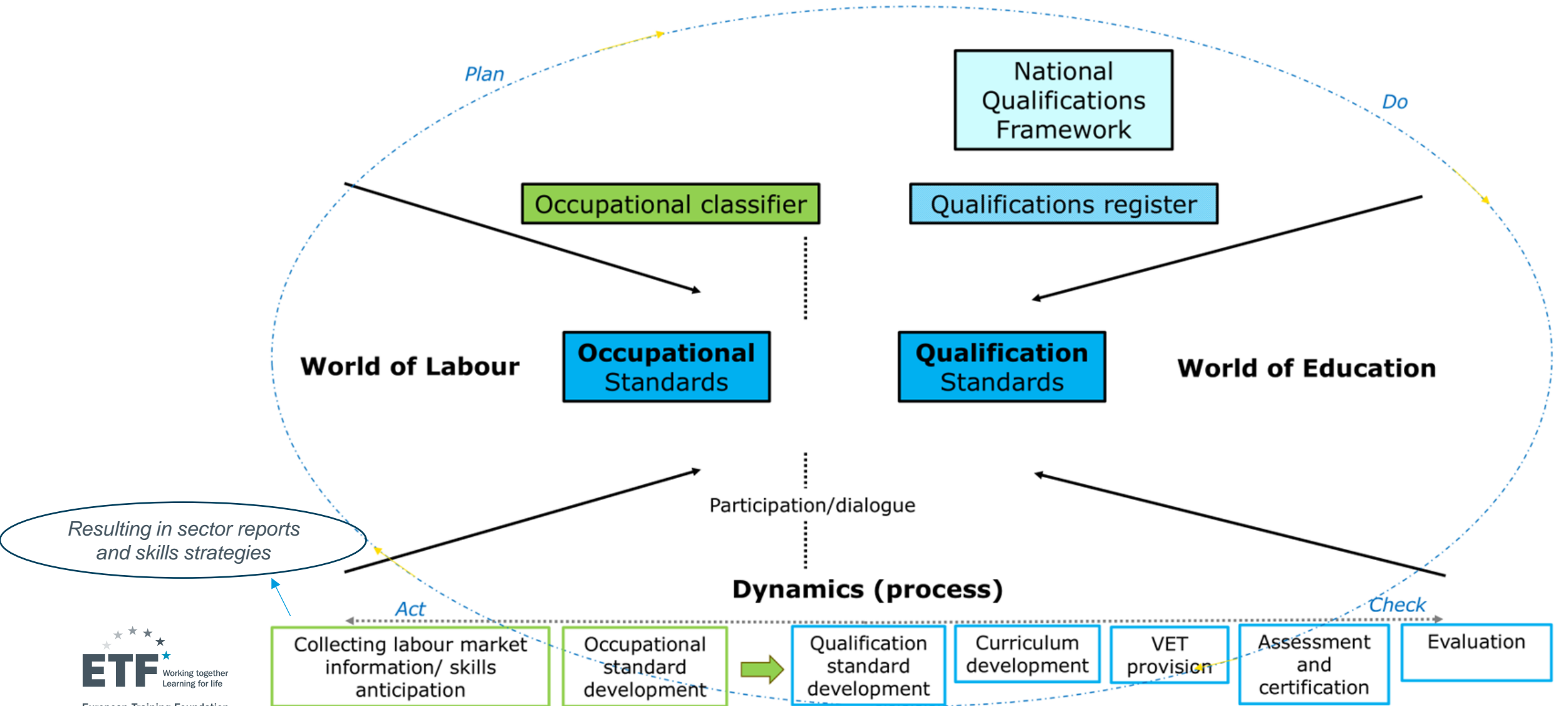
RECAP

Pasqualino Mare, Epke Vogel and
Ghada Amin

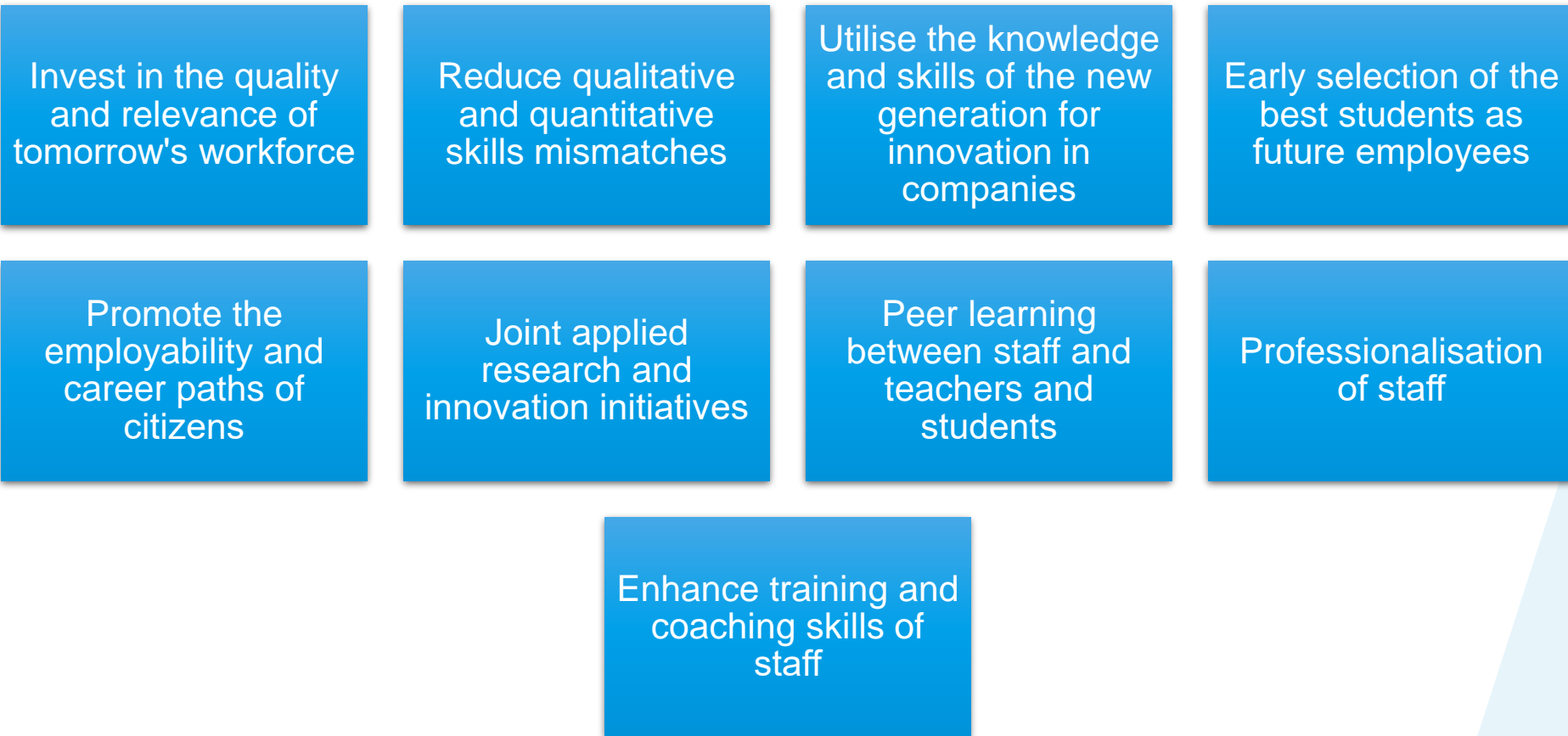
Institutional positioning SSC



Vocational qualification process



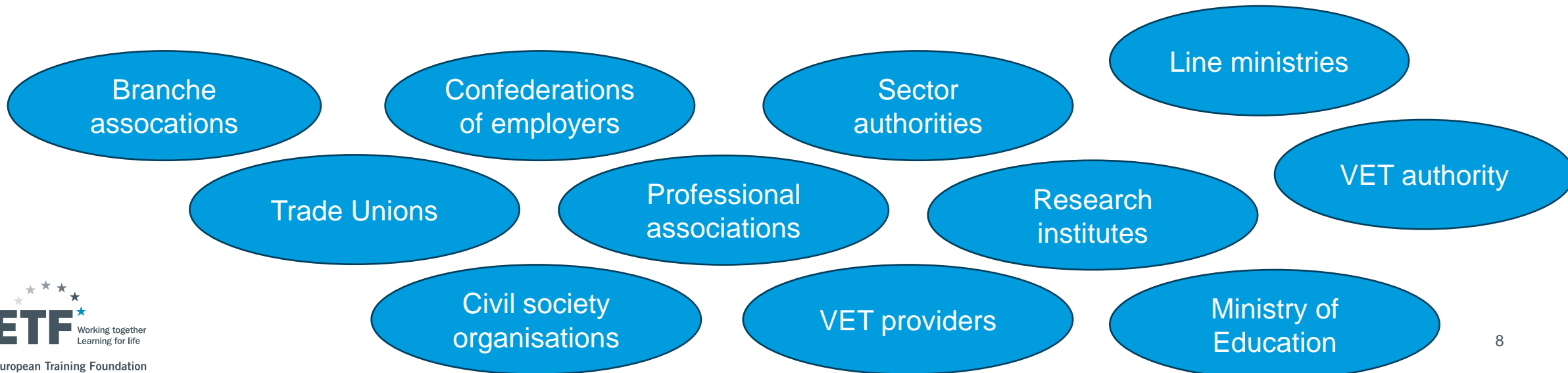
Why should private sector cooperate with VET?



Social dialogue and relevant social partners in VET

Social dialogue:

The process of exchange between social partners to promote consultation and collective bargaining. Social dialogue can be bipartite (involving representatives of workers and employers) or tripartite (also involving public authorities and civil society). It can take place at various levels, namely company, sectoral/cross-sectoral and local, regional, national or transnational levels (Cedefop, 2014)



Social Dialogue in skills development/VET policies

- *Is the process of exchanges about VET*
- *It concerns the integration of social partners in the three dimensions of any VET system: **what to teach, how to teach and how to govern the overall system***
- *The social partners mediate between the world of work and education*
- *As they represent companies and employees and are institutionally integrated into the VET governance system, social partners contribute to the relevance, quality and legitimacy of VET systems*
- *The dialogue usually takes place through cooperation mechanisms between VET stakeholders, such as Sector Skills Councils*
- *Social dialogue in VET is part of the multi-level governance system of VET in which social partners are involved. The dialogue and cooperation take place at different levels of the VET policy cycle.*

Why Sector Skills Councils?



Enhance **coordinated engagement** of key sectorial stakeholders, education and training authorities and the industry in meeting current and future skills requirements



A good mechanism for achieving the country's stated policy intention of making the national TVET system responsive to the needs of the economy and cost-effective in terms of returns on both public and private investment in skills development



Provide a single skills platform and counterpart for concertation and cooperation with various stakeholders on skills, education and training related challenges and opportunities in the sector



Act as a negotiation forum for employers and trade unions on education and training matters

Possible roles of SSCs

Provide the required qualitative and quantitative sector and skills intelligence

Develop and update sector skills strategies

Support or lead the design and updating of occupational standards or profiles

Contribute to the design and updating of educational standards

Compile career information and engage in career promotion activities

Other possible roles

Develop methods of assessment for testing or validating skills

Accredit training organisations providing good quality skills for the sector

Set requirements for apprenticeship systems (eg duration, necessary training, supervision)

Arrange and administer schemes of levies (payroll taxes) and grants in their sector

The objective of Egyptian SSCs in Renewable Energy

Improve skills levels, productivity and competitiveness in the sector and thus contribute to upgrading the workforce skills to bridge the skills gap in labour market.

With a focus on addressing skills needed for enterprises engaged in the RE sector in Egypt

The MoPED (2023) Umbrella SSC Decree No. 115 for Year 2023, states as specific objectives:

- Addressing Skill Gaps and Workforce Development
- Standardisation and Certification
- Promoting International Competitiveness
- Promoting Research and Innovation
- Supporting Policy Development
- Encouraging Diversity and Inclusion
- Enhancing Collaboration Between Stakeholders
- Fostering Lifelong Learning and Upskilling

Lessons learned from visit to the Netherlands



Who would like to say something present during that study visit



?



Lessons learned visit NL

- Strong cooperation between TVET and private sector at all levels
- Quality of teachers
- Autonomy of TVET providers
- Regular up-dating of curricula and training materials/approaches is possible at providers level
- Strong benefits from EU cooperation (and funding)
- Good image of and participation in TVET
- Strong confidence in and among students
- There is transparency in educational and career pathways
- Awareness among stakeholders on importance of cooperation and joint investment in skills
- Theory and practice are combined in all learning activities
- There are clear labour market perspectives for learners and they are well informed about it
- Private sector provides funding to schools (e.g. donation of equipment)

CURRENT DEVELOPMENTS

Pasqualino Mare

Follow-up
Workforce
Egypt

Input
MoPEDIC

Recent Developments to Overcome Challenges



The recent establishment of the Egyptian TVET Quality Assurance and Accreditation National Authority ETQAAN under the authority of the Prime Minister, for quality assurance and accreditation of TVET institution and TVET programmes.



The establishment of the Centre for the Enhancement for Quality Assurance in Technical Education (CEQAT) within the MoETE



The establishment of the Technical Vocational Education Teachers Academy TVETA for training technical education trainers, instructors, teachers, master trainers, assessors and verifiers.

Recent Developments to Overcome Challenges

- Introducing Competency-Based Curriculum (CBC), which emphasizes students' practical skills
- Development of an Egyptian/National Qualification Framework: Contributing international and international transparency.
- Emphasizing the systematic/formal engagement of private sector/employers in TVET, at different levels; Applied Technology Schools, sector specialized Centres of Competence (CoC), and establishment of a framework for Sector Skills Councils.

MAPPING OF LABOUR MARKET INFORMATION RESOURCES

Labour market information and skills intelligence

Labour market information: a set of qualitative and quantitative data on production activities, innovations, challenges, employment trends, jobs and careers, and characteristics of the sector.

A labour market information system consists of a set of institutional arrangements, procedures and mechanisms that are designed to produce labour market information (ILO, 1997)

Skills intelligence focuses specifically on data analysis related to skills development and skills needs aiming at anticipating and adapting skills supply to changing skills developments and needs:

- (i) intelligence creation
- (ii) information dissemination
- (iii) anticipation and matching policies and instruments



**What do people do
in this job/
industry?**



**How many people
work
in this
job/industry?**



**What qualifications do
I need for this job/
industry**



**How much do people
get paid to do this
job?**



**What skills and
qualities
do I need for this
job?**

LABOUR MARKET INFORMATION



**What are the typical
working hours for
this job/industry?**



**What percentage
of men and
women work in
this job/industry?**



**Where can this job/
industry take
me in the future?**

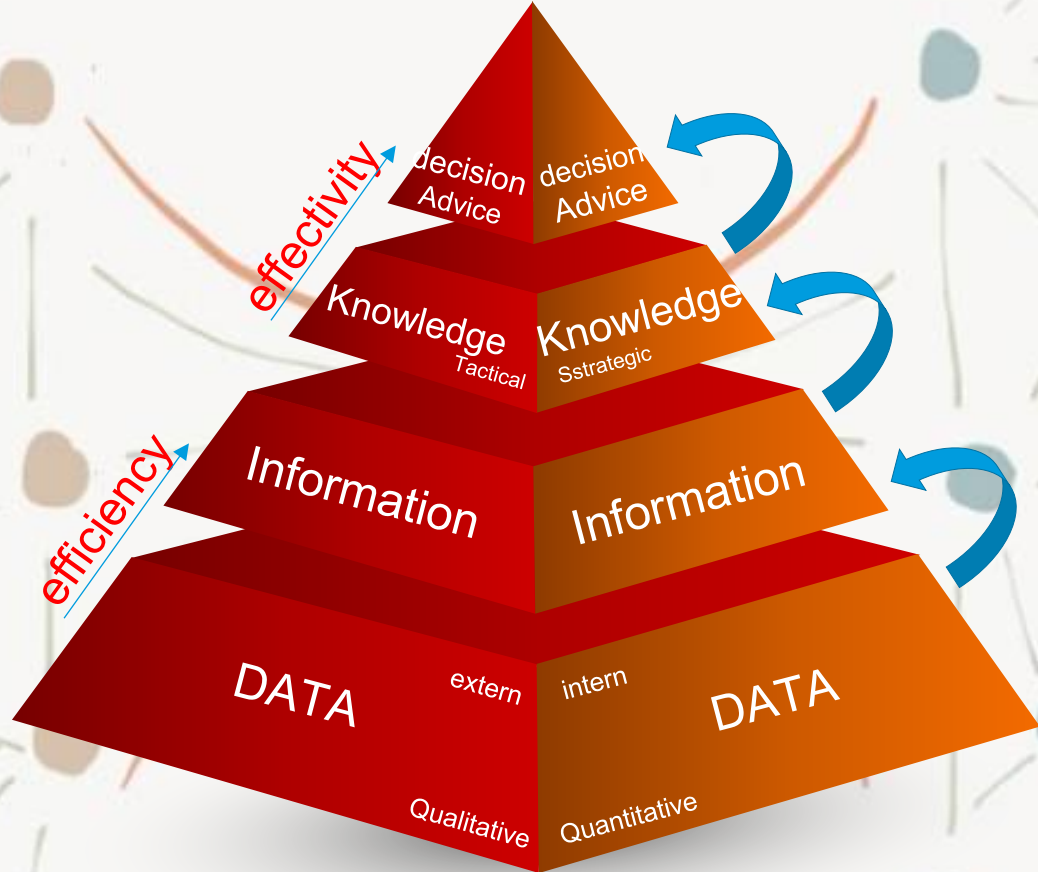


**Where are these jobs
located around the
country?**



**How many of these
jobs will there be in
the future?**

★ ACTION! ★



- Labour market
- TE & VT
- Trends
- Jobs
- Life long learning
- Min Env & other Mins
- ENOC
- CAPMAS
- Job sites
- Development orgs
- Chambers
- Associations
- Schools
- Students
- NGOs

Group exercise: Mapping of Labour Market Information resources

What information/data is needed and where to collect data that serves:

- **The description of labour market trends and skills demand in the sector and subsectors, and definition of occupations within the sector**
- **The development of occupational standards for the main occupations or specialisations in the Renewable Energy sector**

Type and name of resource: report, database, website, survey

Organisation issuing the information or data

SECTOR REPORTS AND SKILLS STRATEGIES

Purpose and use of sector (skills or human capital) reports

- Identify and describe trends, challenges and opportunities in an economic sector that are related to employment and skills development and aim at minimising current and future skills mismatches
- Monitor and document evolving skills demand driven by new technologies and the changing labour markets

Reports are used by policy makers, employers, employees and education and training providers for:

- identifying skills policies and strategies
- planning HRD in organisations
- designing and implementing relevant education and training

Reports also serve for providing career information that can be used by citizens in their career planning

After identifying scope of the analysis, main steps include

Desk research

Date source identification

Literature review

Statistical analysis of existing data sources on the sector

Fieldwork

Focus groups with experts and stakeholders

Bilateral interviews with innovative companies and researchers

Analytical report

Combine results of desk research and fieldwork into comprehensive report

Provide usefull recomendations for policy makers, employers, empoyees and education and training providers

Disseminate to selected audience

Factors contributing to skills mismatches in Egypt's renewable energy sector

- Limited skills anticipation across the labour market and the energy sector.
- Absence of a National Qualifications Framework. Temporary draft occupational standards have been developed for occupations in the energy sector via partnerships of education providers with leading companies.
- Under-developed work-based learning (WBL), including the lack of general policies supporting academia-industry collaboration, and absence of funding to incentivise companies to engage in it.
- Weak links between industry and academia with regards to skills anticipation and curriculum development.
- Limited incentives for the industry to promote skills development and facilitate re-skilling. A formal framework guiding the roll-out of such incentive schemes does not exist.
- Absence of an SSC, for identifying skill needs, developing occupational standards and partnering education for updating curricula.

Existing relevant national reports and strategy documents

Egypt aims to diversify its energy production through various strategies targeting sustainable and renewable sources of energy production, including the

- Egyptian Solar Plan
- National Green Hydrogen Strategy
- Integrated Sustainable Energy Strategy to 2035 released by the Ministry of Electricity and Renewable Energy in 2015, aiming to become a global leader in renewable energy
- Climate Change Strategy 2050, released and managed by the Ministry of Environment (MoEnv)
- Egypt Vision 2030 strategy

Existing relevant international reports and statistics

International organisations supporting these Egyptian initiatives through sector reports and needs analysis:

- ETF (2023). [The Future Skill Needs in the Egyptian Energy Sector. Country Report](#)
- IRENA (2018). International Renewable Energy Agency: [Renewable Energy Outlook: Egypt. Technical Report](#).
- International statistic overview of the US Energy Information Administration. [Egypt page](#)
- US International Trade Administration (2022). Egypt Country Commercial Guide, [Electricity and Renewable Energy section](#)
- ILO Renewable Energy and Jobs. [Annual Overview 2024](#) (Global report)

Existing research, journals and other publications

- Aliyu, A.K., Modu, B., & Tan, C.W. (2018). *A review of renewable energy development in Africa: A focus in South Africa, Egypt and Nigeria*. Renewable and Sustainable Energy Reviews 81: 2502-2518.
- Atlam, B. and Rapiea, A. (2016). *Assessing the Future of Energy Security in Egypt*. International Journal of Energy Economics and Policy. Vol, 6(4): 684-700
- Esily, R. R., Chi, Y., Ibrahiem, D. M., & Chen, Y. (2022). *Hydrogen strategy in decarbonization era: Egypt as a case study*. International Journal of Hydrogen Energy
- Ersoy, S. R., Terrapon-Pfaff J. (2021), *Sustainable Transformation of Egypt's Energy System. Development of a Phase Model*. Friedrich-Ebert-Stiftung
- Molina, A. (2020, November 23). *Sustainability in Egypt. Egypt's roadmap to reaching its sustainable energy goals 2035: Energy transition and modernization of the Egyptian energy sector*
- Salah, s.i., Eltaweel, M. & Abeykoon, C. (2022) *Towards a sustainable energy future for Egypt: A systematic review of renewable energy sources, technologies, challenges, and recommendations* Cleaner Engineering and Technology

INTERNATIONAL EXAMPLES OF HOME GROWN RE SECTOR REPORTS AND SKILLS STRATEGIES

1. South Africa

The Energy and Water Sector Education and Training Authority (EWSETA) and the Skills Roadmaps

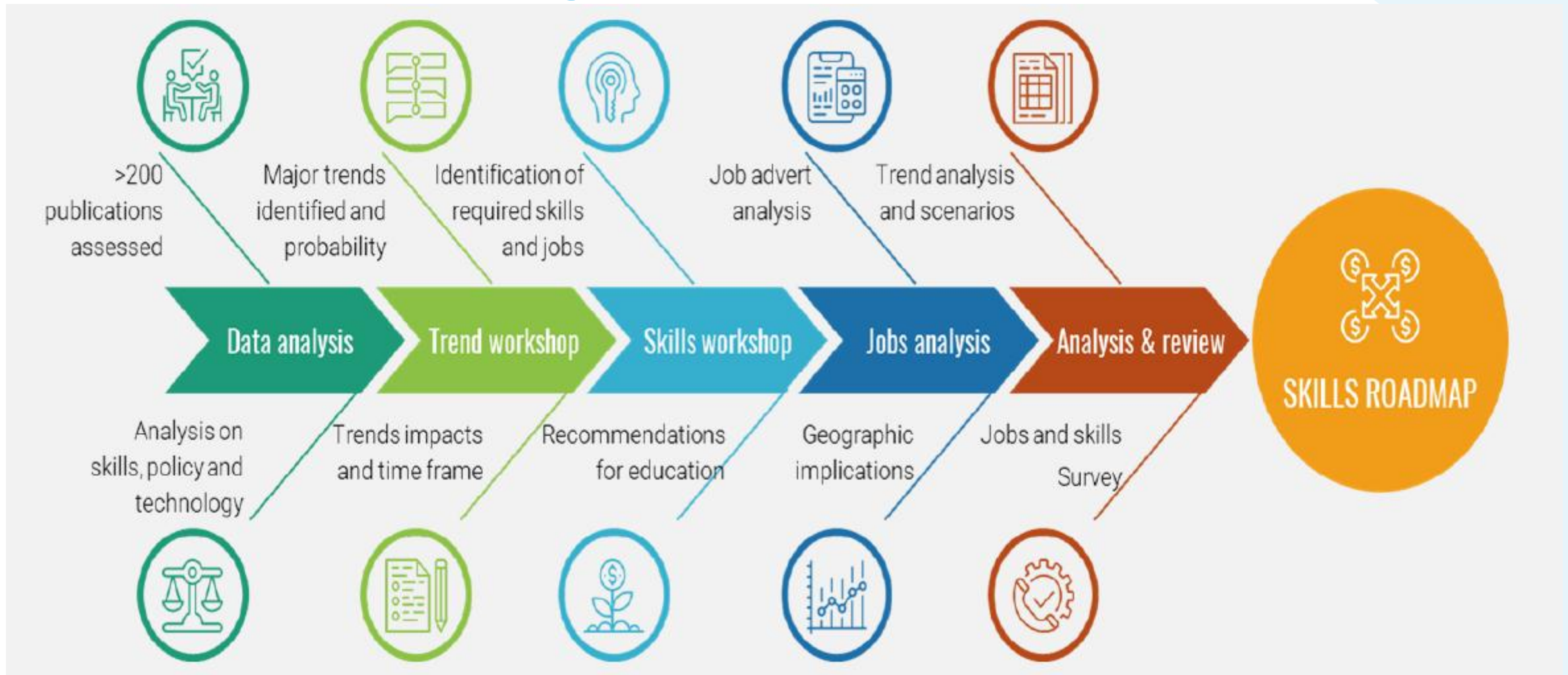
EWSETA is one of South Africa's 21 SETAs and operates as a skills development authority serving the energy and water sectors.

It was established in terms of Section 9 of the Skills Development Act (SDA), 97 of 1998, is organized under the National Skills Authority which is part of the Department of Higher Education and Training (DHET). Role of EWSETA:

- Research to determine the skills demand
- Facilitating and coordinating skills development programmes to respond to sectoral challenges
- Driving excellence through quality assurance
- Fostering an ecosystem in energy and water that creates inclusive economic development

Related to the first role, EWSETA develops the [South Africa Energy Skills Roadmap 2023](#) in the database of the Energy & Water Sector of the Education Training Authority (EWSETA),

Process of developing the EWSETA Skills Roadmap



2. The Netherlands

The Foundation for Cooperation between vocational education and the Labour Market (SBB) and the Labour Market Trend Monitor and Atlas online dashboard

The tripartite body SBB is mandated by the Ministry of Education, Culture and Science to conduct the following legal tasks for the VET qualification structure and work-based learning:

- Accreditation, coaching and advice for work placement companies
- Maintenance and development of (parts of) qualifications
- Research: labour market, work-based learning and efficiency
- Policy advice on connection VET and labour market: sector committees and thematic advisory committees
- Credential evaluation for VET

One of the 8 Sector Committees managed by SBB focuses on Technology and Built Environment, which operated a temporary working group on Energy Transition, Circularity and Climate Adaptation (providing [skills report](#) in 2021)

SBB develops and updates the [Labour Market Trend Monitor technology and built environment](#) and [Atlas](#): a dashboard that informs members of the Sector Committees on relevant TVET and labour market developments

Structure of the skills report of the Working Group Energy Transition, Circularity and Climate Adaptation

- Summary
- Introduction (Sector Committee request, reading guidelines, terminology)
- Rational and approach
- Changes in the profession
- Relevant initiatives in VET
- The current national qualification structure for VET
- Advice for a relevant and flexible VET offer
- Annexes:
 - Findings per sub area
 - Addressing of sub areas in current national qualification profiles
 - Addressing of sub areas in current optional VET modules and certificates



Welkom bij de Atlas beroepsonderwijs en arbeidsmarkt

Dit dashboard informeert de leden van de sectorkamers, marktsegmenten en thema-adviescommissies over actuele onderwijs- en arbeidsmarktontwikkelingen.

Wat kan je verwachten

De Atlas geeft op kwalificatieniveau een beeld van de ontwikkeling van het aantal mbo studenten en hoe zij hun weg vinden op de arbeidsmarkt. Ook is een beeld geschetst van de te verwachten trends en ontwikkelingen.

Zelf aan de slag

Linksboven kun je een selectie maken van één of meerdere sectorkamers, marktsegmenten, dossiers, kwalificaties, of niveau. Zo kun je zowel binnen een sector als tussen sectoren vergelijken. De gemaakte selectie is op alle pagina's actief. Daarnaast kun je kiezen voor de hoofdstukken onderwijs, arbeidsmarkt of ontwikkelingen. Zodra je deze gekozen hebt, zie je bovenaan tabbladen met informatie over het onderwerp.

Het hoofdstuk 'samenvatting' werkt uitsluitend als één kwalificatie gekozen is.

Dit biedt alle kwantitatieve informatie van het meest recente jaar over deze kwalificatie in één oogopslag.



Startpagina



Selecties



Samenvatting



Onderwijs



Arbeidsmarkt



Ontwikkelingen

Datum laatste update:

woensdag 22 mei 2024

Ga direct naar

Samenvatting

[Atlas dashboard](#)

Onderwijs

Kwalificaties

Inschrijvingen

Gediplomeerden

Kans op stage

Doorstroom

Arbeidsmarkt

Vacatures geschikt voor schoolverlaters

Baankans

Ontwikkelingen

Sectoranalyse

Trends

UWV

Dutch Top Sector Energy: Towards a coherent approach to human capital for the energy transition

Advisory [report](#) of the network organisation Top Sector Energy analysing human capital development initiatives at local, regional and national level supporting the energy transition in the Netherlands.

Top sector Energy platform has also supported the development of a Position Paper **“Transition pathways for utilising untapped female labour potential in high-stress professions involved in the energy transition and preventing (energy) poverty”**

3. India

The Sector Skills Councils and the Skills Gap reports

The SSC complement the existing vocational education system and address skill gaps. Each SSC has a Research Wing to collect LM and skills intelligence

Role of NSDC and Sector Skills Councils (on RE these are the Hydrocarbon SSC and the Green Jobs SSC):

- Conduct labour market research
- Improve the delivery mechanism
- Guarantee quality assurance

Related to the first role, the **SSC for Green Jobs** develops and updates [reports](#) such as:

- Skill Gap Assessment Across Green Hydrogen Sector in India (2024)
- India's Expanding Clean Energy Workforce: 2022 Update

Group exercise: Mapping of training provision in the sector

Identify the formal and non-formal technical education and or vocational training (non-university) programmes or specialisations (modules/minors) that you know are on offer in the RE sector

Name of the programme

TE or VT provider

Other info (duration, level, target group, etc)

Background information

[Skills demands analysis | ETF](#) (ETF webpage on skills analysis activities and approaches)

[Egypt Energy sector country report EN.pdf](#) (ETF skills analysis report, 2023)

[Skills Anticipation and Matching: How much do you know? | ETF](#) (Six guidelines prepared by ETF, Cedefop and ILO, 2016) or via [Methodological guides on anticipation and matching of skills | ILO](#)

[South African Energy Skills Roadmap Report 2023.pdf](#) (from the Energy and Water Sector Education and Training Authority)

[Energietransitie, circulariteit en klimaatadaptatie](#) (Dutch Sector Committee report on energy transition, circularity and climate adaptation, 2021)

[Trendplaten Techniek en gebouwde omgeving](#) (Dutch overview of trends in sector Technology and Built Environment, including RE sector)

[GH2-Skill-Gap-report MSDE.pdf](#) (from the Indian SSC on Green Jobs: “Skill Gap Assessment Across Green Hydrogen Sector in India”, 2024)

[Hydrocarbon Sector Skill Council](#) India